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| PROJECT DESCRIPTION | | | | EQUIPMENT LIST (CON'T) | | | | EQUIPMENT LIST (CON'T) | | | | F H W A REGION NO. | | | | STATE | | FED. AID PROJ. NO. | | SHEET NO. | | TOTAL SHEETS | |
| 3 | | | | MD | | | | | | | | | | | | | | | | | | | |

I. General

This project involves the installation of a new traffic control signal and geometric improvements at the intersection of MD 2-4 (Solomons Island Road) at Traskers Blvd. in Calvert County, Maryland. MD 2-4 is assumed to run in a north-south direction.

II. Intersection Operation

This intersection is proposed to operate in a fully actuated mode with northbound MD 2-4 left turn lane operating as an permitted / exclusive phase. Eastbound Traskers Blvd. Will operate in exclusive phase.

III. Special Notes

1.) Maintenance of traffic will be handled by the contractor utilizing the following standard plates for traffic control: 104.00-13, 104.00-19, 104.00-21 - 104.00-24, 104.17-01, 104.37-01, 104.38-01, 104.48-01, 104.81-02.

2.) The following contact persons for District #5 are as follows:

Mr. Paul Armstrong
District Engineer
Phone # (410) 841-5450

Mr. Lawrence Elliott
Asst. District Engineer - Traffic
Phone # (410) 841-5450

Mr. Chuck George
Asst. District Engineer - Maintenance
Phone # (410) 841-5450

Mr. John Mays
Asst. District Engineer - Utility
Phone # (410) 841-5450

Mr. Richard L. Daff, Sr.
Chief, Traffic Operations Division
Phone # (410) 787-7630

3.) Upon completion of this project, the contractor shall contact Mr. Robert Snyder of the MD-SHA at (410) 787-7635 to arrange for the telephone line installation. The contractor shall provide Mr. Snyder with the nearest street address, zip code and phone number.

EQUIPMENT LIST

Equipment to be Furnished and Installed by the Contractor

| Item No. | Qty | Units | Section | Description |
|----------|-----|-------|---------|---|
| 1 | EA | 813 | | Install ground mounted signs |
| 84 | SF | 813 | | Install overhead sign - for signals. |
| 590 | LF | 815 | | Furnish and install saw out for signal. |
| 1 | EA | 829 | | Furnish and install a 27 ft. steel pole with a 60 ft. mast arm (Note: Four - 2 in. x 90 in. anchor bolts). |
| 1 | EA | 829 | | Furnish and install 27 ft. steel pole with twin 70 ft./50 ft. mast arms (Note: Four - 2 in. x 90 in. anchor bolts). |
| 2 | EA | 818 | | Furnish and install 20 ft. lighting arm on signal structure |
| 120 | LF | 812 | | Furnish and install wood sign support (4" x 6") drilled |

EQUIPMENT LIST (CON'T)

Equipment to be Furnished and Installed by the Contractor

| Item No. | Qty | Units | Section | Description |
|----------|-----|-------|---------|--|
| 3 | CY | 205 | | Test pit excavation |
| 140 | LF | 555 | | Furnish and install 24 in. white reflective thermoplastic pavement marking |
| 10.5 | CY | 801 | | Furnish and install concrete for signal foundation. |
| 2 | EA | 804 | | Furnish and install ground rod - 3/4 in. diameter x 10 ft. |
| 20 | LF | 805 | | Furnish and install 4 in. schedule 80 rigid PVC conduit - Trenched. |
| 290 | LF | 805 | | Furnish and install 3 in. schedule 80 rigid PVC conduit - Trenched. |
| 120 | LF | 805 | | Furnish and install 3 in. schedule 80 rigid PVC conduit - bored. |
| 1020 | LF | 805 | | Furnish and install 2 in. schedule 80 rigid PVC conduit - Trenched. |
| 40 | LF | 805 | | Furnish and install 1 in. liquid tight flexible non-metallic conduit for detector wire sleeve. |
| 2 | EA | 806 | | Furnish and install 250 Watt high pressure sodium lamp and luminaire with photo cell |
| 1 | EA | 807 | | Furnish and install control and distribution equipment. |
| 230 | LF | 810 | | Furnish and install No. 6 AWG standard bare copper ground wire. |
| 240 | LF | 810 | | Furnish and install electrical cable 1- conductor No. 4 AWG - THHN/THWN |
| 1500 | LF | 810 | | Furnish and install electrical cable - 2 conductor (Aluminum shielded). |
| 100 | LF | 810 | | Furnish and install electrical cable - 5 conductor (No. 14 AWG). |
| 1020 | LF | 810 | | Furnish and install electrical cable - 7 conductor (No. 14 AWG). |
| 2350 | LF | 810 | | Furnish and install loop wire encased in flexible tubing (No. 14 AWG). |
| 560 | LF | 810 | | Furnish and install 2 - conductor - Tray cable (No. 12 AWG). |
| 10 | EA | 811 | | Furnish and install electrical handhole. |

EQUIPMENT LIST (CON'T)

Equipment to be Furnished and Installed by the Contractor

| Item No. | Qty | Units | Section | Description |
|----------|-----|-------|---------|---|
| 136 | SF | 813 | | Install ground mounted signs |
| 84 | SF | 813 | | Install overhead sign - for signals. |
| 590 | LF | 815 | | Furnish and install saw out for signal. |
| 1 | EA | 829 | | Furnish and install a 27 ft. steel pole with a 60 ft. mast arm (Note: Four - 2 in. x 90 in. anchor bolts). |
| 1 | EA | 829 | | Furnish and install 27 ft. steel pole with twin 70 ft./50 ft. mast arms (Note: Four - 2 in. x 90 in. anchor bolts). |
| 2 | EA | 818 | | Furnish and install 20 ft. lighting arm on signal structure |
| 120 | LF | 812 | | Furnish and install wood sign support (4" x 6") drilled |

PHASING SEQUENCE CHART

| | | | | | | |
|--------------------|------|------|------|------|------|------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | | | | | | |
| Phase 1 & 6 | -G/G | -G/G | G | R | R | R |
| 1 & 6 Change | -Y/G | -Y/G | G | R | R | R |
| Phase 2 & 6 | G | G | G | G | R | R |
| 2 & 6 Change | Y | Y | Y | Y | R | R |
| Phase 4 | R | R | R | R | G | G |
| 4 Change | R | R | R | R | Y | Y |
| Flashing Operation | FL/Y | FL/Y | FL/Y | FL/Y | FL/R | FL/R |

R = Red Indication

Y = Yellow Indication

G = Green Indication

-Y = Yellow Arrow Indication

-G = Green Arrow Indication

FL = Flashing Indication

WIRING DIAGRAM

WIRING KEY

A-D, F-G, H - 2 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG) ALUMINUM SHIELDED.

E - DELETED

J, K - 2 CONDUCTOR ELECTRICAL CABLE (TRAY NO. 12 AWG)

L-O - 7 CONDUCTOR ELECTRICAL CABLE (NO.14 AWG)

P - 1 CONDUCTOR CABLE (NO. 6 AWG) COPPER GROUND WIRE.

Q-S - 5 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)

T - 12 PAIR TWISTED JELLYFILLED INTERCONNECT CABLE (NO. 19 AWG)

LW - LOOP WIRE.

PS - POWER SERVICE

⊕ - GROUND ROD

WELLS & ASSOCIATES, LLC.

TRANSPORTATION, TRAFFIC, AND PARKING CONSULTANTS

1420 Spring Hill Road Suite 1000, Silver Spring, Maryland 20910
Phone: 301-717-1000 Fax: 301-717-1001

2001 River Road Suite 200, Annapolis, Maryland 21403
Phone: 410-293-5252 Fax: 410-293-5253

400 Virginia Avenue, Pikesville, Maryland 21093
Phone: 410-625-2525 Fax: 410-625-2527

| | | | |
|-----------|--|--|--|
| REVISIONS | | APPROVALS | |
| | | ASST. DIVISION CHIEF, TEDD | |
| | | ASST. DISTRICT ENGINEER, TRAFFIC | |
| | | CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION | |
| | | DIRECTOR, OFFICE OF TRAFFIC & SAFETY | |

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION

Office of Traffic & Safety

TRAFFIC ENGINEERING DESIGN DIVISION

MD 2-4 (Solomons Island Rd) at

Traskers Boulevard

GENERAL INFORMATION SHEET

LOG MILE #:

DRAWN BY: Wells

CHECK BY: Wells

SCALE: NTS

F.A.P. NO.

S.H.A. NO.

COUNTY

BW 996 M 82

CALVERT

PLAN SHEET NO.:

SHEET NO.

DATE 5 / 1 / 98

OF